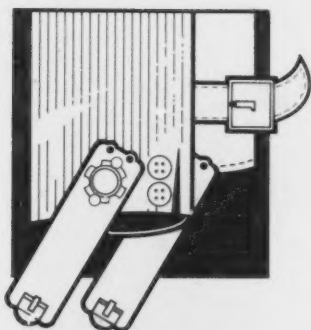


SHRINKAGE

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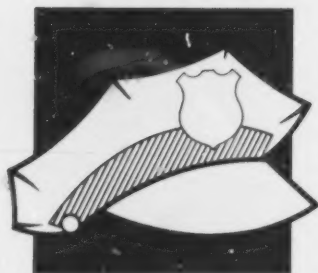
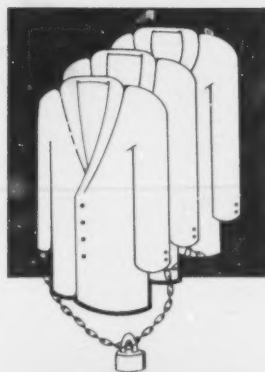
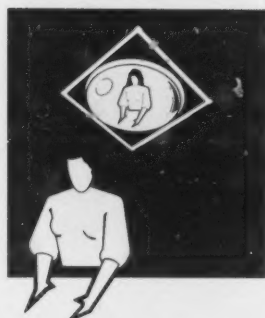
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NMRI

National Mass Retailing Institute

5th Annual Security and Shrinkage Study



NEW
Profile of the
Shoplifter

CONDUCTED FOR NMRI BY



ARTHUR YOUNG

NMRI

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SECURITY AND SHRINKAGE

Annual Study of Inventory Shrinkage Control and
Security Procedures in Retailing
Conducted for the National Mass Retailing Institute by
Arthur Young

NATIONAL MASS RETAILING INSTITUTE (NMRI)

The NMRI is an association representing more than 450 companies in the mass merchandising industry. The association keeps its members current on retail and business matters through publication of a monthly newsletter and sponsorship of meetings, seminars, and roundtables for groups that include executives involved in:

- Annual merchandising and management conventions
- Top management
- Financial management
- Advertising and promotion
- Loss prevention
- Personnel
- Government affairs

Communications about NMRI — and requests for additional copies of this study — should be directed to its president, Richard Hersh, at the association's headquarters: 570 Seventh Avenue, New York, NY 10018.

ARTHUR YOUNG

Arthur Young is an international accounting and consulting firm. Through its National Retail Group, the firm specializes in providing accounting, tax, and management consulting services to executives and companies in the retail industry. Arthur Young has offices in 82 cities in the United States and in 254 cities in 68 other countries. Questions or comments for Arthur Young should be addressed to either of the following:

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ARTHUR YOUNG

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December 1983

Dear Reader:

We are pleased to report the results of the 5th Annual Study of Security and Loss Prevention Practices and Shrinkage in the Retail Industry. Once again, the study has been sponsored by the National Mass Retailing Institute. This year, a first-ever look at a "Profile of the 'Typical' Shoplifter" is included, along with an analysis of shrinkage by region. Shrinkage results analyzed by class of trade, and detailed studies of prosecution policies and preventive measures, show in what directions the retail industry is moving to help reduce this \$2.1 billion burden.

The major results in this year's report include:

SHRINKAGE PATTERNS

- Shrinkage rose from 2.0% to 2.2% of total sales in 1982—an increase of 10%.
- Department stores reported the highest level of shrinkage, followed by mass merchandisers and specialty stores.
- Clothing, health and beauty aids, and jewelry were noted as the high shrinkage departments.

PROFILE OF THE TYPICAL SHOPLIFTER

- Among customers apprehended for shoplifting, there were no differences between the attributions to males and females. Further, high unemployment may be linked to increased shrinkage: 40% of apprehended males were unemployed, as were 49% of the females.

PROSECUTION POLICIES

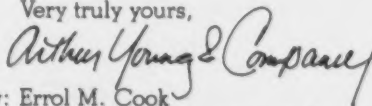
- Retailers are becoming more selective in prosecuting customers and employees: one-third prosecute only when conviction is certain.
- The rate of convictions to prosecutions is up this year to 87%, compared to the 77% reported last year.

SHRINKAGE: PREVENTIVE MEASURES

- Retailers say they are placing greater emphasis on prevention, rather than apprehension. Also, 63% report spending more money on the prevention of shoplifting than on the apprehension of shoplifters.
- \$485 million was spent on security and loss prevention in 1982—an 8% increase over 1981.
- Fifty-four percent of this year's participants report using point-of-sale (POS) systems to help control shrinkage. However, POS systems may not yet be fully integrated into all areas of retail operations.
- Eighty-eight percent of this year's respondents believe that increased employee education is most likely to be effective in reducing shrinkage.
- Employee recognition or reward programs for improved loss prevention are used by 75% of the respondents. Further, 52% said that they provide monetary awards to employees for their shrinkage control contributions.

The information presented in this study was obtained from questionnaires completed by retail organizations and was computer tabulated; it has therefore not been subjected to independent audit. We encourage our readers to contact us directly with comments and suggestions for next year's survey.

Very truly yours,



by: Errol M. Cook
Chairman, National Retail Group

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Introduction

This report is the fifth in a series conducted by Arthur Young under the sponsorship of the National Mass Retailing Institute (NMRI). The report provides information that we hope is of value to the retailer in planning new loss prevention programs and evaluating programs currently in practice, and is designed to aid management in the development of action-oriented programs to improve shrinkage results.

Several modifications have been made to this year's survey to better address the needs and interests of retailers. New this year is the profile section, which outlines the characteristics of the "typical" shoplifter. We believe this to be an exciting and informative addition. Based upon comments received from past participants and discussions with retail leaders, several other areas receive new or expanded coverage, most notably regional shrinkage attributions and personnel screening practices. A detailed analysis is also provided this year for specialty stores.

Again this year, we include a separate report on food retailers (Appendix I). Data used to compile findings and statistics relating to food stores are not included in the main body of this report.

For purposes of this study, the following definitions apply:

- *Mass merchandisers.* Discounters, general merchandisers, drug chains, and variety chains, with multiple departments, central checkout, and limited selling staff.
- *Department stores.* Multidepartmental retailers offering departmental checkout with highly visible selling service. This includes specialty stores that have the principal characteristics of department stores.
- *Specialty stores.* Few departments with central checkout, generally with 7,500 square feet or less of selling space.

The study was conducted during the summer and fall of 1983. References to 1982 generally relate to companies with year-ends of December 31, 1982 or January 31, 1983. Questionnaires were mailed to retail companies using lists compiled from a variety of sources. The identities of the respondents have been kept confidential.

Responses to the questionnaire were processed by an independent computer service organization. These data were then analyzed by Arthur Young personnel, and presented in the *Executive Highlights* (released in November 1983) and in this final report. All percentages reported have been rounded to the nearest whole number, except in cases where the percentage was less than 1.0%.

The findings presented in this study represent data submitted by the participating retail organizations only and should not be used to make projections about the entire retail industry.

Tables and narrative covering answers to every question on the original survey questionnaire are not included because of space limitations or, in some cases, because of a lack of a sufficient number of responses to some of the questions. Additional details relating to specific questions may be provided on request.

This year we have integrated the tables and graphs into the text of the report to facilitate the reader's understanding of the material. While the text highlights and interprets the survey findings, the tables will provide more detailed statistics.

Almost all of the tables in this report are organized vertically. The first column indicates the topic of the table. Each subsequent column presents an analysis of the data. For example, the topic of Table 2 is "1982 Sales Volume of Participating Companies by Number of Respondents," and the first analysis is of "Mass Merchandisers." Reading down the table, the reader will find that only three of the responding mass merchandisers had sales volumes of less than \$10 million, 13 had sales of between \$10 million and \$49 million, and so on.

In interpreting the tables, readers should be aware that multiple responses occur on tables where participants selected more than one answer. Frequently, the totals add up to more than 100% when multiple responses occur. Table 12, "Security Devices Used on the Selling Floor," is a typical example of a multiple response question.

The Participants

Participants in this year's study represent 180 retail organizations operating in more than 36,000 locations with total sales of nearly \$97 billion. Last year's study included retail organizations operating in more than 33,000 locations, with an aggregate sales volume in excess of \$84 billion.

Eighty-six mass merchandisers operating in more than 22,000 locations participated in this year's study. Their aggregate 1982 sales volume was in excess of \$80 billion. This year's participants also included 36 department store chains or organizations operating in more than 750 individual locations with 1982 sales of \$9 billion, and 58 specialty stores or chains operating in nearly 14,000 individual locations with sales in excess of \$7 billion.

Table 1

The Participants

	Number of Companies	Number of Stores	Sales Volume (\$ Billions)
Mass Merchandisers	86	22,025	\$80.8
Department Stores	36	769	9.0
Specialty Stores	58	13,994	7.1
Total: 1982	180	36,788	\$96.9

More than half (99) of the participants reported 1982 sales in excess of \$100 million, while 67 had sales of \$100 million to \$499 million. This distribution is similar to last year, when 51% of the participants reported sales in excess of \$100 million and 35% had sales of \$100 million to \$499 million. Twenty-four of this year's mass merchandisers had at least \$500 million in sales. As would be expected, department stores and specialty stores were smaller; only six department stores and two specialty stores had sales volumes of \$500 million or greater.

Table 2

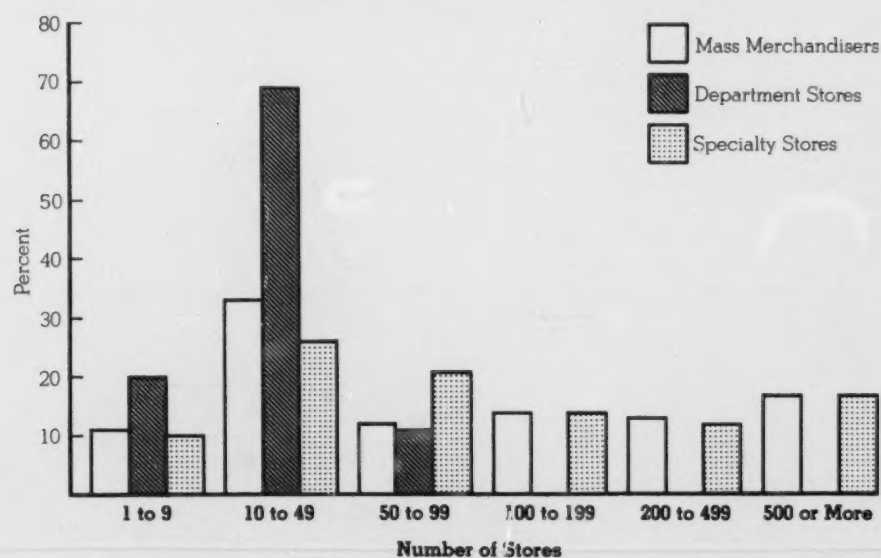
1982 Sales Volume of Participating Companies by Number of Respondents

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Under \$10 Million	3	0	5	8
\$10 to \$49 Million	13	3	16	32
\$50 to \$99 Million	15	9	14	38
\$100 to \$499 Million	29	18	20	67
\$500 Million and Over	24	6	2	32

Half of the respondents had fewer than 50 individual store locations. Fifteen percent had at least 500 stores. As expected, mass merchandisers and specialty store companies tended to have a greater number of individual locations than did department stores. More than 40% of both the mass merchandisers and the specialty stores had at least 100 store locations. By comparison, all of the department stores had fewer than 100 locations.

Graph A

Analysis of Participants by Number of Stores



Sixty-five percent of the participants reported operating at least half of their stores in suburban locations. This was true of 64% of the mass merchandisers, 76% of the department stores, and 59% of the specialty stores.

Table 3
Location of Stores

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
100% Urban	18%	21%	25%	21%
1% to 49% Suburban	18	3	16	14
50% to 74% Suburban	19	6	15	15
75% to 99% Suburban	25	58	22	31
100% Suburban	20	12	22	19

Shrinkage Results

Study participants reported inventory shrinkage to be, on average, 2.2% of sales for 1982. This is a 10% increase over the 2.0% reported in last year's survey. Shrinkage for the mass merchandiser category increased from 1.9% of sales to 2.2% in 1982. Department stores also reported an increase in shrinkage, with this year's results at 2.6%, compared to 2.3% from last year. Specialty stores, however, reported 1.8% shrinkage in 1982—a decrease from the 2.0% reported last year. The comparatively higher shrinkage rate for department stores may in part be attributed to the higher value of the merchandise sold, which produces higher dollar shrinkage. One major factor is the attractiveness to thieves of the high resale values of expensive merchandise.

Table 4
Shrinkage Results

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Percentage of Shrinkage 1982	2.2%	2.6%	1.8%	2.2%
Percentage of Shrinkage 1981	1.9	2.3	2.0	2.0
Amount of Shrinkage 1982 (\$ Millions)	\$1,780	\$200	\$152	\$2,132

Based on our discussions with certain retailers, the above results on increased shrinkage levels were anticipated, partially due to the recession the economy experienced during 1982. Retailers in certain parts of the country indicated that high unemployment may also be linked to the increased shrinkage results. The potential influence of these factors may help explain the results we obtained regarding 1982 theft apprehensions. Survey results on this issue, to be discussed in later sections, show a dramatic increase in the number of apprehended individuals, as well as an interesting finding regarding the employment status of apprehended customer shoplifters.

As was the case last year, larger companies in this year's survey tended to have lower shrinkage levels. On average, companies with sales of \$1 billion or greater reported shrinkage of 1.8%, compared to companies with less than \$100 million in sales, that reported shrinkage in excess of 2.3%. Similarly, companies with 500 stores or more reported average shrinkage at 1.8%, compared to the 2.3% reported for companies with less than 50 stores. We would suspect that this trend may largely be attributed to the fact that larger companies typically have more and better resources available to them (including money, people, and sophisticated control systems) to combat shrinkage than do their smaller counterparts.

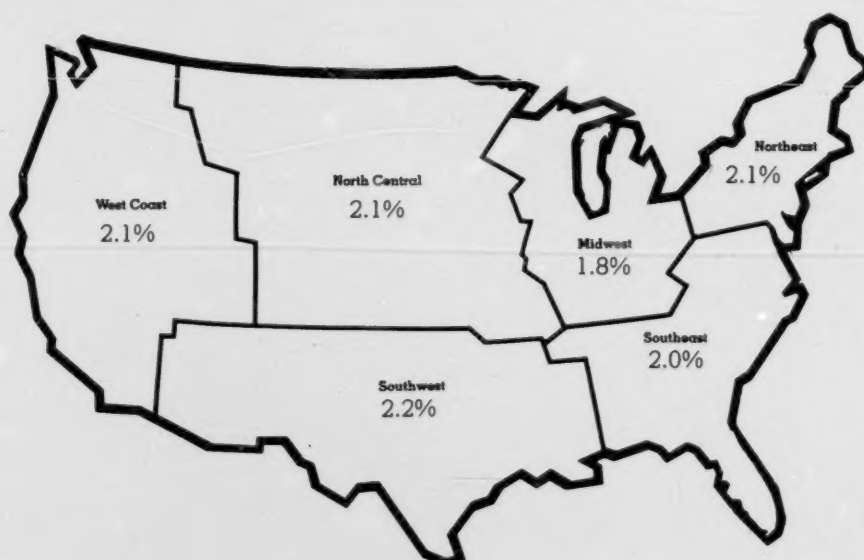
In 1982, the dollar value of shrinkage for participating companies exceeded \$2.1 billion. Retailers providing information on high shortage departments indicated

that *clothing, health and beauty aids, and jewelry departments* were likely to experience the highest incidence of loss. These findings may reflect both resale value attractiveness and personal use theft motivations. Such information on high risk areas should prove useful to retailers as they plan for potential merchandising and display activities.

Later in this report, we will discuss some of the actions being taken by retailers that seem to be helping to reduce shrinkage. These actions are discussed in the sections on security expenditures, shrinkage control devices, prosecutions, and personnel policies.

Based on feedback from last year's survey participants and conversations with retailers, we included a new section this year examining shrinkage on a regional basis to capture information on relative geographical differences. However, the data we present are not intended to be indicative of overall nationwide shrinkage levels, because not all retailers operate in every region, and not all multiregional participants provided statistics by region. The data are useful, however, to demonstrate trends.

Table 5
Shrinkage Levels By Region



Shrinkage Results

Discussions with retailers around the country indicated that the trends highlighted above are not unusual, for several reasons. First, in the Midwest, the economic downturn has been evident for a number of years and retailers have been tightening security as a result. In the Southwest, 1982 was the first year of weakness and many retailers did not adjust quickly enough to the problems that arose as a result of high unemployment and economic pressure.

In the Northeast, mass merchandise and specialty stores were below the overall average at 1.8% and 1.9%, respectively, with department stores reporting a substantially higher overall average of 2.9%. In the West, however, mass merchandise stores reported an average higher than the overall (2.4%), with department and specialty stores both reporting shrinkage below the average.

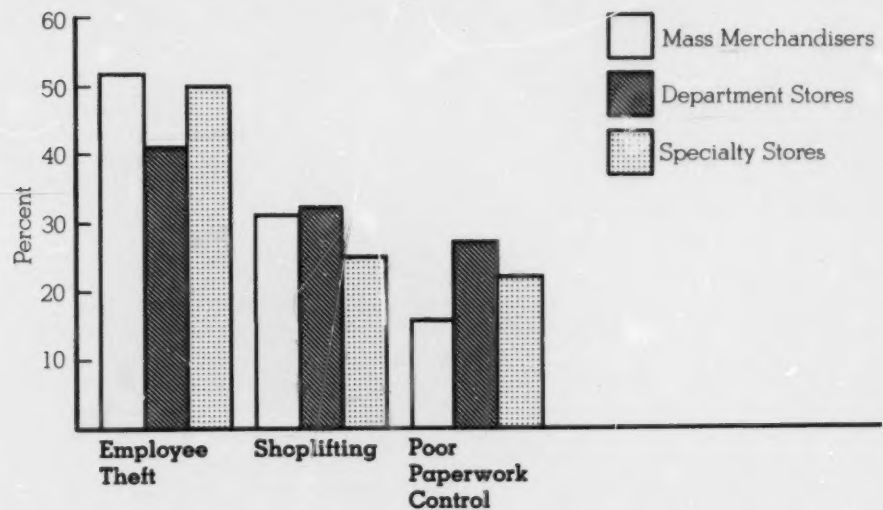
Shrinkage Attributions

Again this year, the participating retail organizations attributed approximately 50% of inventory shrinkage to employee theft, 30% to customer shoplifting, and 20% to errors in paperwork and accounting procedures. Employee theft may result from weak systems and controls, employees having access to merchandise they could not normally afford, poor supervision and disregard for company policies, and collusion with other employees or customers. It should be noted that poor paperwork may not represent an actual loss of merchandise, but may reflect a breakdown in operational controls or accounting procedures. Clearly, the fact that 70% of all shrinkage is attributed to *factors internal to and under the control of the company* reflects poorly on several management issues. This same situation, however, also offers retailers the greatest opportunity to improve their shrinkage performance through more effective financial and operational controls and personnel management activities.

In general, companies do not have formal methods for accurately determining what factors contribute most to shrinkage. The following graph is based on the opinions and perceptions of the retailers in the survey population.

Graph B

Attributions of Aggregate Shrinkage by Store Type



Mass merchandisers were more likely to attribute shrinkage to some form of employee theft (52%) than were department stores (41%) and specialty stores (50%). Mass merchandisers attributed 16% of their shrinkage to poor paperwork control, as compared to department stores (27%) and specialty stores (22%). This may indicate that mass merchandisers are more confident in their control of paperwork and operational procedures than are either department or specialty stores.

Profile of the "Typical" Shoplifter

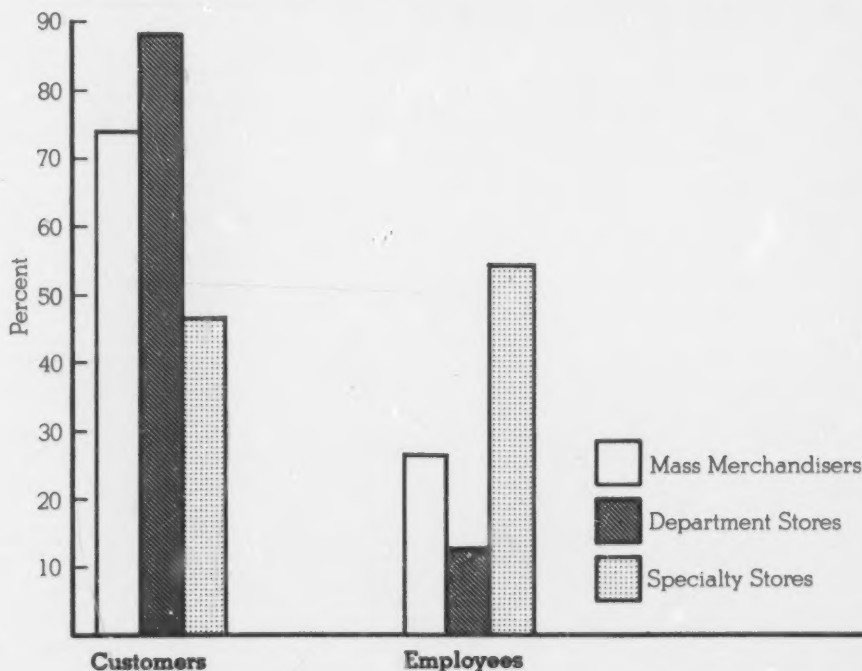


In an attempt to develop statistics on the demographics of the "typical" shoplifter and employee thief, this year's survey requested detailed information from participants on the characteristics of those individuals apprehended in 1982. We believe the results obtained are quite interesting, in that they repudiate some old myths and preconceived notions about what types of individuals may be the most likely to steal.

On average, more than two-thirds (69%) of all apprehensions were attributed to customers, with the remaining percentage (31%) attributed to employees. Mass merchandisers and department stores attributed a higher than average percentage (74% and 88%, respectively) to customer shoplifters, with specialty stores reporting a higher percentage of employees (54%).

Graph C

Apprehensions of Customers and Employees by Type of Retail Segment



Overall, companies with less than 1% shrinkage attributed a lesser percentage (55%) to customer shoplifters than companies with shrinkage over 3%, which attributed 76% to customers.

For purposes of clarity, the following sections discuss customer and employee apprehensions separately.

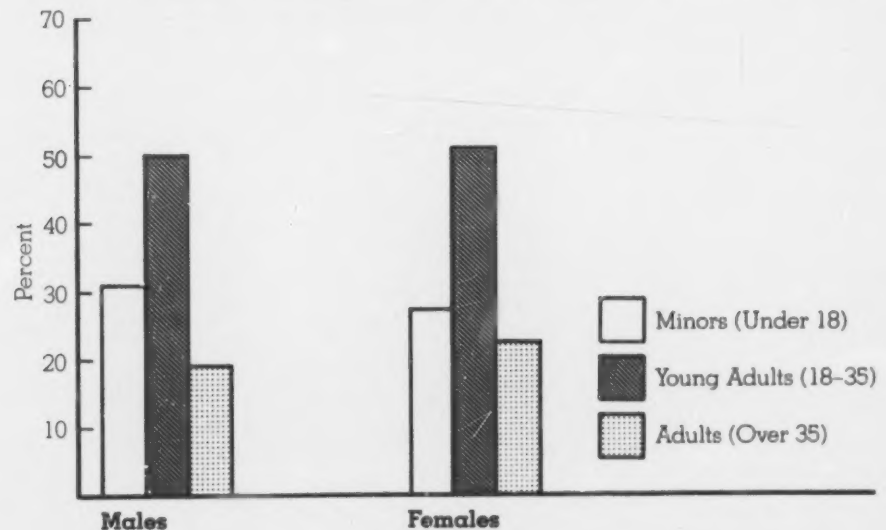
Customer Apprehensions

The results of this section revealed a surprising twist to popular perceptions; on average, there was no difference in the percentage of apprehensions attributed to male and female shoplifters. There were slight differences, however, when the data were analyzed by type of store. Mass merchandisers and specialty stores reported that more than half of their apprehensions were of males, while department stores reported that almost 60% of their apprehensions were of females.

For both male and female customers, across all store types, the young adult category (ages 18 to 35) had the highest percentage of attributed apprehensions. At least 50% of the apprehensions were attributed to this group, with the remaining 50% being divided between minors (under 18) or adults (over 35). The second most frequently reported age group was minors for both males (31%) and females (27%).

Graph D

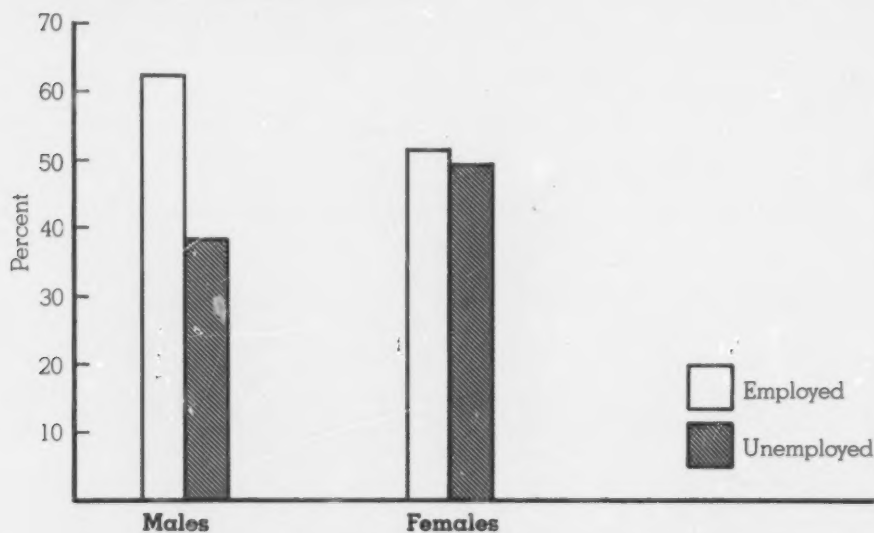
Customer Apprehensions by Age Groups by Sex



Respondents to this year's survey reported that more than 60% of the apprehended males were employed, while for females there was only a slight difference between the percentage who were believed to be employed (51%) and the percentage who were unemployed (49%).

Graph E

**Customer Apprehensions – Employed vs. Unemployed
for Males and Females**



The highest percentage of employed males apprehended was in the specialty store category (65%), with department stores reporting the second highest (57%). Specialty stores also reported the highest percentage of employed females apprehended (57%). Large companies with sales of \$500 million and greater reported a higher incidence of apprehended unemployed males (50%) than did smaller companies with sales under \$100 million (36%). The same trend held true for females, with large companies attributing 57% of their apprehensions to unemployed females, compared to 45% in smaller companies.

Prior to mailing the questionnaire, discussions held with selected retailers, vendors, and members of the press indicated an expectation that the results would show that a significant majority of apprehensions would be of middle-aged, unemployed females. When the results of the survey became known, we went back and interviewed some of the same people. Analysis of the input we received indicated that their original perception was based on who they believe is the typical customer, not the typical shoplifter. Additional discussions with retailers, particularly

loss prevention personnel, indicated that actual apprehension rates tell only one story about gender differences. If one were to analyze the number of female apprehensions relative to the number of female shoppers, and do likewise for males, marked differences would occur, since it is generally understood that there are more female shoppers.

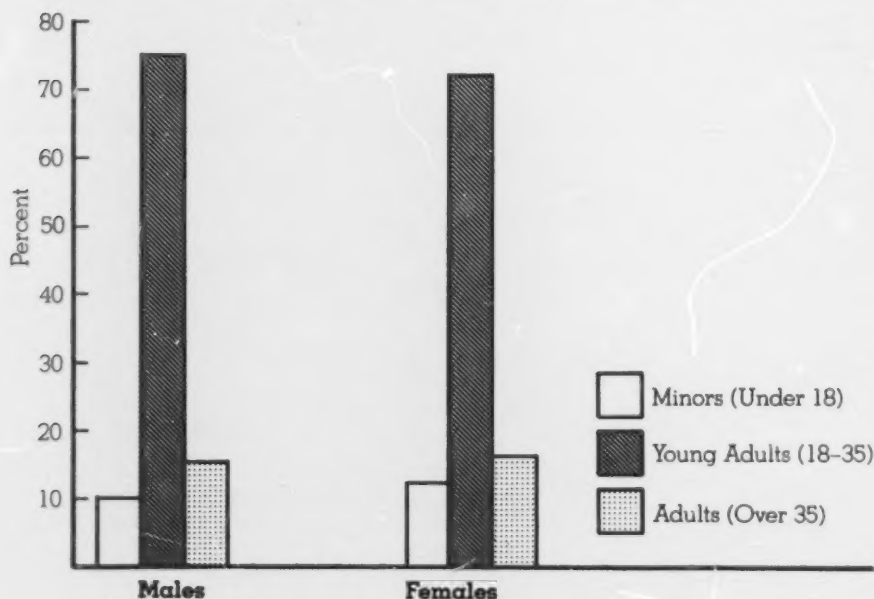
Employee Apprehensions

Apprehensions of female employees were slightly more prevalent (54%) than apprehensions of male employees (46%). In department stores, an even lower percentage (39%) than average was attributed to male employees. This may reflect the composition of the work force.

In a trend similar to that reported for customers, the young adult category had the highest percentage of employee apprehensions. The difference, however, was that there was an even greater percentage of apprehensions (75%) attributed to young adults, with the second highest category attributed not to minors but to adults. This may be linked to the fact that there are fewer minors than adults in the typical store work force.

Graph F

Employee Apprehensions by Age Groups by Sex



More than half of all employee apprehensions reported were attributed to cashiers (31%) and selling floor personnel (27%). Department stores, because of the type of checkout functions they use and the number of checkout locations, have fewer cashier apprehensions (19%) than the overall average, but have a much higher percentage of apprehensions attributable to selling floor personnel (47%).

Table 6

Categories of Employees Apprehended

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Aisle Clerks	7%	8%	4%	6%
Cashiers	43	19	23	31
Departmental	4	3	1	3
Selling Floor Personnel	12	47	37	27
Store Clerical and Administrative	5	3	3	4
Store Backroom	11	7	4	8
Management	10	2	17	11
Security	1	2	1	1
Distribution Center	2	3	4	3
Training Personnel	0	1	7	2

Prosecution Expenditures and Policies

The responding companies reported that the cost of prosecution as a percentage of sales remained relatively constant for 1981 and 1982 at slightly more than 0.2%. This amounts to more than \$22 million in annual expenditures for both 1981 and 1982 to prosecute shoplifters and other offenders. The highest prosecution costs (as a percentage of sales) were reported by mass merchandisers (.35%), followed by specialty stores (.20%) and department stores (.04%).

The fact that the cost has remained constant, even though the number of prosecutions has increased, indicates that many cost control factors are in place. Discussions with various participants suggest that they now have better evidence available than in the past (television tapes, electronic tag results, etc.), which tends to reduce the necessity and cost of having many witnesses present.

This year's survey indicates that smaller companies tend to spend less on prosecutions, both in real dollars and as a percentage of sales, than do larger companies. Companies with sales of less than \$100 million and with fewer than 50 stores spend a smaller proportion of their sales on prosecutions (.12% and .08%, respectively), compared to companies with sales of \$1 billion or more and with more than 500 stores (.37% and .16%, respectively).

Policies

Policies regarding prosecution of all customers and employees are comparable to those which were reported last year. Twenty-nine percent of the companies said their policy is to prosecute all employees caught stealing, and 34% said they prosecute all customers caught shoplifting. For both customers and employees, more than one-third of the companies responded that they prosecute only when a conviction is certain. This is an increase over the 24% reported last year, and may serve to explain the increase in this year's conviction rate to 87% of all prosecutions, up from the 77% reported last year. If a higher percentage of companies are prosecuting only when a conviction is certain, and the courts are responding with judgments similar to those in years past, then retailers seem to be selecting better cases to bring to court. Our interviews with retailers confirm this point.

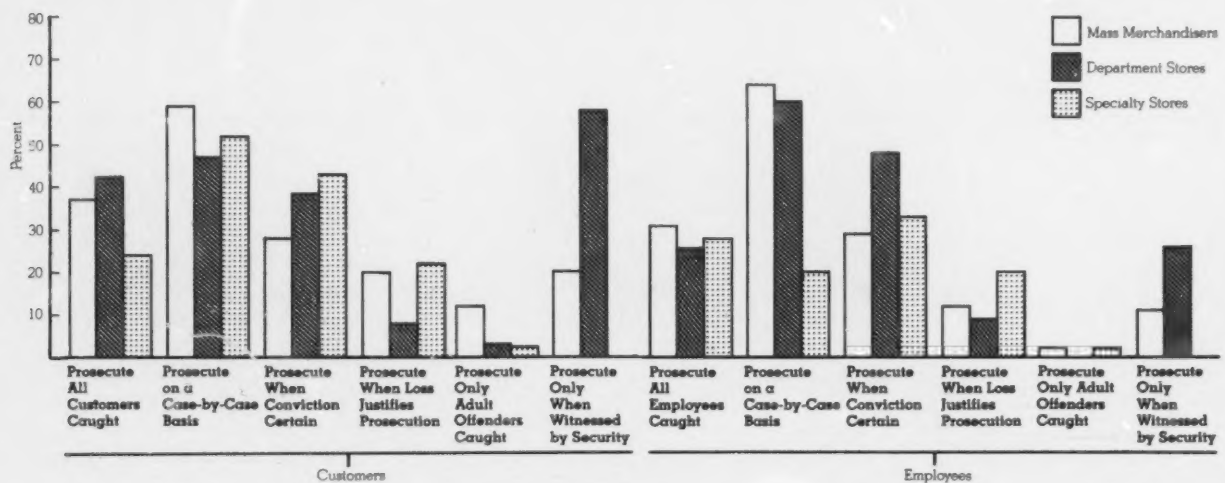
Retail companies do not usually prosecute all apprehended shoplifters for three main reasons:

- The expense involved;
- The time required for filing complaints and attending trials; and
- The possible negative community relations image that could result from prosecuting juveniles.

Therefore, companies typically prosecute only when they feel they have a strong case. It may also be that retailers are capitalizing on the use of more effective surveillance techniques and advanced technologies to develop better evidence with which to go to court.

Graph G

Prosecution Policies



The total number of apprehensions for 1982 increased substantially, to 572,100, a figure which is 23% higher than that reported by this survey population for 1981. For those companies reporting full data on apprehensions, prosecutions, and convictions, this year's results also indicate increases in the rates of prosecution and conviction.

Table 7

Apprehensions, Prosecutions, and Convictions

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants	1981*
Total Number of Apprehensions Reported	482,200	79,600	10,300	572,100	
Prosecutions as a Percentage of Apprehensions	61%	65%	36%	61%	48%
Convictions as a Percentage of Prosecutions	84	98	95	87	77
Convictions as a Percentage of Apprehensions	51	64	34	53	37

* As reported in the 1981 survey

The greatest number of apprehensions were reported for mass merchandisers. However, the retailers in that category are most frequently large (24% have over \$500 million in sales), with many store locations (17% have over 500 stores), and mass merchandisers comprised the greatest proportion of companies in this year's survey population.

Department stores have a higher prosecution rate (65%) and conviction rate (98%) than do mass merchandise and specialty stores. This may be attributed to the fact that the more expensive merchandise they generally carry, and the larger security staffs available for court appearances, predispose department stores to push more for prosecutions. They are also more successful in building strong cases to bring to court.

Again this year, retailers reported a decrease in the number of false arrest suits. Of the 572,100 apprehensions reported for 1982, only 14 of every 10,000 resulted in false arrest suits, compared to the 22 of every 10,000 reported in last year's survey. This is another confirmation of the observation that retailers are preparing better cases and have more hard evidence available.

Security and Loss Prevention Programs

Philosophy of Security Expenditures

Companies are placing a greater emphasis on preventing shoplifting than they are on apprehending shoplifters, according to the respondents to this year's survey. Less than 15% felt that the emphasis was equal. In very low shrinkage companies (those with less than 1% shrinkage), 87% responded that a greater emphasis was placed on prevention.

Companies also seem to be spending more money on prevention (63%) versus the apprehension of shoplifters. An even greater percentage of the low shrinkage companies (84%) reported that more money was spent on the prevention of shoplifting.

Table 8

Attribution of Management Philosophy Emphasis: Apprehension vs. Prevention

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
More on Apprehensions	12%	11%	4%	9%
More on Prevention	75	61	83	75
Equal Emphasis	12	28	9	14
Cannot Determine	1	0	4	2

Table 9

Attribution of Money Spent: Apprehension vs. Prevention

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
More on Apprehensions	16%	21%	7%	14%
More on Prevention	62	41	76	63
Equal Amounts	16	35	12	18
Cannot Determine	6	3	5	5

In a sense, these findings appear to support the idea that retailers are growing in their understanding of and sophistication in the management of losses. That is, rather than focusing their efforts and money on "after the fact" apprehension activities, they are taking a more proactive stance in developing preventive measures designed to minimize their up-front risks.

Security Expenditures

Expenditures on security and loss prevention staffing, equipment, and programs for fiscal 1982 increased 8% from the security expenditures reported in 1981. The \$485 million spent represents nearly 0.5% of sales, a figure which is comparable to the percentage for 1981. Many retailers have increased their use of technological devices, which tend to cost more than passive devices such as mirrors and observation booths. Mass merchandisers spent less than the overall average (0.4%), while department stores spent a greater percentage (0.7%).

Table 10

Total Security Expenditure as a Percentage of 1982 Sales Volume

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Less than .1%	17%	6%	26%	18%
.1% to .24%	24	3	26	20
.25% to .49%	26	18	16	21
.5% to .99%	25	58	14	28
1% or More	8	15	18	13

Following last year's trend, companies with lower shrinkage levels spent a smaller proportion of their sales on security costs. For shrinkage levels of less than 1%, the expenditure was 0.4% of sales; for shrinkage levels of 3% and greater, the expenditure was 0.7%.

Security expenditures represented a smaller percentage of sales in larger companies. Companies with sales of \$1 billion or greater and more than 500 stores spent 0.4%, while companies with sales of less than \$100 million and less than 50 stores spent 0.5%.

Shrinkage Control Devices

The ranking of the devices listed below relates to the frequency of responses, with the first entry representing the response which had the greatest frequency.

Table 11

Shrinkage Control Devices

Devices Used to Control Shrinkage	Devices Judged to Be <i>Most</i> Effective	Devices Judged to Be <i>Least</i> Effective
Mirrors	Electronic Tags	Mirrors
Lock-and-Chain Devices	Guards	Visible TV Monitors
Guards	Point-of-Sale Systems	Guards
Limited Access Areas	Observation Booths	Limited Access Areas
Point-of-Sale Systems	Limited Access Areas	Attendants
Observation Booths	Concealed TV Monitors	Point-of-Sale Systems
Visible TV Monitors	Lock-and-Chain Devices	Concealed TV Monitors
Electronic Tags	Visible TV Monitors	Lock-and-Chain Devices
Concealed TV Monitors	Attendants	Electronic Tags
Attendants	Mirrors	Observation Booths

Mirrors were the most commonly used security devices (77%), followed by lock-and-chain apparatus (68%) and guards (61%). Despite their popularity, however, mirrors were reported as being the least effective method for controlling shrinkage by 48% of the respondents. They tend to be popular because of their low cost, but in order to be effective, they require additional surveillance personnel. Electronic tags, used by 38% of the respondents, were judged to be the most effective device by 49% of those companies who utilize them.

Point-of-sale systems are being used by 54% of the participants—an 8% increase over last year's reported use. However, despite the substantial claims often made for POS, only 19% of those who use it judged it to be the most effective security device. One reason for this is that many retailers have still not fully integrated POS technology into all areas; therefore, its full usefulness has not been completely developed.

Table 12

Security Devices Used on the Selling Floor

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Mirrors	85%	78%	66%	77%
Limited Access Areas	63	60	59	60
Observation Booths	54	75	18	46
Visible TV Monitors	51	47	25	41
Concealed TV Monitors	45	61	9	36
Electronic Tags	34	64	29	38
Point-of-Sale Systems	54	78	39	54
Guards	68	81	41	61
Lock-and-Chain Devices	69	81	59	68
Attendants	38	56	14	34

Larger companies (sales of \$1 billion or more) tend to utilize security devices more frequently than smaller companies. For example, 75% of the large companies use guards, compared to 49% in companies with sales of less than \$100 million. While 75% of the large companies use observation booths, only 37% of the smaller companies report their use.

Of all industry segments, department stores reported using virtually all of the security devices more often than other industry segments. For example, 64% of the department stores use electronic tags, compared to 34% of the mass merchandisers and 29% of the specialty stores. Compared to last year's report, electronic tags are being used with greater frequency by mass merchandisers and department stores, with use by specialty stores remaining constant. Overall, there was a 31% increase in the use of electronic tags compared to last year. Guards, used by 81% of the department stores, were used by only 68% of the mass merchandisers and 41% of the specialty stores.

Table 13

**Percentage of Participants Using a Security Device
That Believe It to Be the Most Effective**

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Mirrors	4%	0%	0%	2%
Limited Access Areas	13	0	22	13
Observation Booths	17	15	20	17
Visible TV Monitors	7	6	7	7
Concealed TV Monitors	8	9	20	9
Electronic Tags	45	48	56	49
Point-of-Sale Systems	17	11	32	19
Guards	26	21	30	26
Lock-and-Chain Devices	5	3	18	8
Attendants	3	10	0	5

Table 14

**Percentage of Participants Using a Security Device
That Believe It to Be the Least Effective**

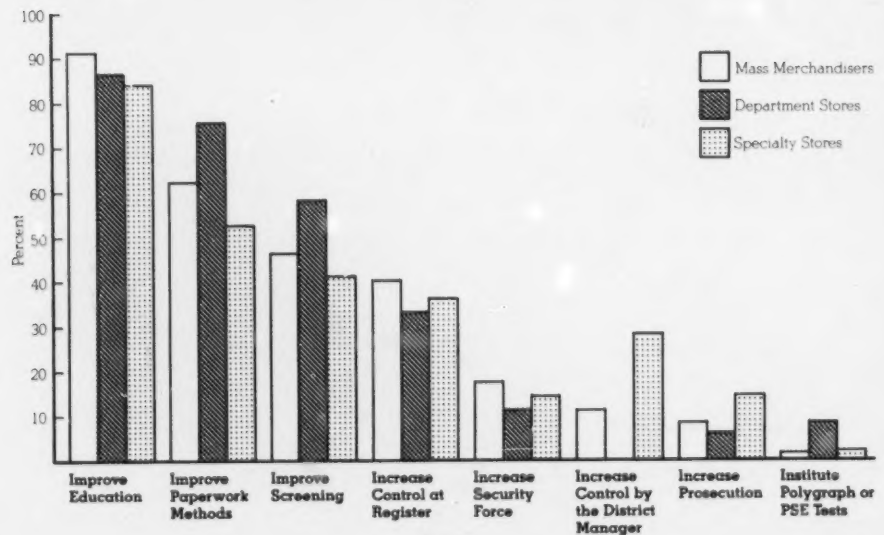
	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Mirrors	44%	46%	54%	48%
Limited Access Areas	10	13	6	9
Observation Booths	2	0	10	2
Visible TV Monitors	9	6	36	14
Concealed TV Monitors	8	0	20	6
Electronic Tags	7	0	0	3
Point-of-Sale Systems	9	4	5	6
Guards	16	0	9	10
Lock-and-Chain Devices	5	3	3	4
Attendants	0	20	13	8

Methods To Reduce Shrinkage

Increased employee education was again judged by the respondents to be the method most likely to be effective in reducing shrinkage (88%). More employee involvement, knowledge, and education in shrinkage control is a trend that appears throughout this year's survey. Sixty-two percent of the participants believe that improved paperwork control and accounting procedures would improve shrinkage results. However, 70% of the high shrinkage companies feel that improved paperwork control and accounting methods would improve shrinkage results, while only 50% of the low shrinkage companies supported this statement. This can perhaps be attributed to the fact that low shrinkage companies may have good control systems already in existence.

Graph H

Action Retailers Believe Would Do the Most to Reduce Shrinkage



Staffing and Screening Practices

Staffing

Department stores tend to employ more full-time people in their security function than do either mass merchandise or specialty stores. Thirty-five percent of the department stores had 100 or more people in the security function, compared to 27% of the mass merchandisers and 2% of the specialty stores.

Eighty-six percent of the specialty stores reported employing less than 20 people in the security function, while only 18% of the department stores employ less than 20 people.

Table 15

Number of Full-Time Employees in the Security Function

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
1 to 4	21%	9%	44%	25%
5 to 9	16	3	20	14
10 to 19	8	6	22	11
20 to 49	20	26	8	18
50 to 99	8	21	4	10
100 or More	27	35	2	22

As we reported last year, large companies employ more full-time security personnel. In companies with sales of at least \$500 million, 60% employ over one hundred security employees, while in companies with sales under \$100 million, only 2% employ security forces which are as large.

Hiring Practices

Among all participants, a background check (e.g., employment record, educational record, and personal references) was the most frequently used method of screening security personnel (90%). This was followed by the use of a security or loss prevention interview (75%). These in-depth interviews, which focus on the applicants' knowledge of specific loss prevention techniques, are not used as frequently for nonsecurity personnel (22%). One-third of the participants are using polygraph testing for security personnel.

Table 16

Methods Used to Screen Security Personnel

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Background Check	93%	94%	83%	90%
Credit Check	35	60	33	40
Polygraph	34	34	31	33
Security/Loss Prevention Interview	78	83	63	75
Personality or Psychological Test	34	20	15	25
PSE Test	8	6	13	9

Participants were asked to indicate the importance of significant retail experience, a college education, or a law enforcement background in hiring security personnel. Of these, significant retail experience was judged to be the most important attribute (42%). A law enforcement background was judged second most important (29%), which is an increase over the 12% reported last year. Almost the same percentage of companies as in recent years (22% in 1981, 23% in 1982) reported that a college education was important in hiring security personnel. Fifty-six percent of the specialty stores consider significant retail experience to be important.

Table 17

Prior Experience Considered to Be Very Important in Hiring Security Personnel

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Significant Retail Experience	36%	38%	56%	42%
College Education	19	24	32	23
Law Enforcement Background	28	24	35	29

Background checks were also the most popular method of screening nonsecurity personnel: 87% of the companies in the survey reported this practice. Personality tests (28%) and credit checks (27%) were the other most frequently used methods. Department stores were less likely to use the polygraph test and the security interview than were the other retail segments.

Table 18

Methods Used to Screen Nonsecurity Personnel

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Background Check	89%	83%	91%	87%
Credit Check	20	29	36	27
Polygraph	21	0	29	19
Security/Loss Prevention Interview	25	14	21	22
Personality or Psychological Test	36	20	21	28
PSE Test	6	6	11	7

Use of Polygraph Tests

The polygraph test is used by more than forty percent of the respondents. Despite its popularity, however, almost none of the companies judged it to be one of the more effective shrinkage control techniques. Management philosophy (79%) and legal constraints (59%) were the reasons given most frequently by companies who refrain from its use.

Table 19

Reasons Why Companies Refrain from Using Polygraph Tests

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Legal Constraints	62%	47%	59%	59%
Management Philosophy	74	84	85	79
Tests Are Not Cost-Effective	32	42	41	36
Tests Do Not Work	11	0	4	7
Companies Have Better Alternative	25	5	26	21
Union Agreement	11	5	11	10

For companies administering the test, 59% do so on a case-by-case basis, and 81% hire an outside service to conduct the polygraph tests.

Table 20

Who Conducts the Polygraph Test?

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Company Employees	8%	10%	3%	6%
Outside Service	77	85	83	81
Both Employees and Outside Service	15	5	14	13

More specialty stores administer the polygraph test (48%) than do either mass merchandisers (37%) or department stores (44%).

Polygraph testing is more popular with smaller companies (sales of less than \$100 million), where 45% of the participants use the technique, than with larger companies (sales of \$1 billion or greater), where only 31% conduct these tests.

Cashiers (59%) and security personnel (60%) are the employee groups most likely to be given polygraph tests.

Table 21

Categories of Employees Given Polygraph Tests

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Aisle Clerks	47%	0%	44%	37%
Cashiers	65	32	65	59
Departmental	43	5	15	26
Selling Floor Personnel	53	5	62	47
Store Clerical and Administrative	49	5	38	37
Store Backroom	57	21	32	42
Management	57	5	59	48
Security	67	74	41	60
Distribution Center	43	16	24	31
Training Personnel	24	0	9	15

Use of PSE Tests

PSE, or voice stress analysis, is used less frequently (21%) than are polygraph tests (42%), according to the survey respondents. As with polygraph testing, management philosophy and legal constraints were the reasons given most frequently by companies that refrain from using PSE. Fifty percent of the companies who use PSE have their own employees conduct the tests, and it is most often used for pre-employment screening purposes.

Table 22

Reasons Why Companies Refrain from Using PSE Tests

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Legal Constraints	24%	45%	29%	30%
Management Philosophy	59	59	50	56
Tests Are Not Cost-Effective	27	23	29	25
Tests Do Not Work	26	0	23	20
Companies Have Better Alternative	20	9	23	19
Union Agreement	2	5	3	3

Table 23

Categories of Employees Given PSE Tests

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Aisle Clerks	44%	17%	43%	38%
Cashiers	50	17	71	48
Departmental	38	17	43	34
Selling Floor Personnel	50	17	57	45
Store Clerical and Administrative	50	17	29	38
Store Backroom	56	33	29	45
Management	69	17	71	58
Security	56	67	71	62
Distribution Center	44	17	29	34
Training Personnel	25	17	29	24

Personnel Policies: Training Programs

Training is an important factor in the orientation of both new security and nonsecurity personnel. Eighty-nine percent of the companies report having some form of in-store training for new security personnel. Training manuals are popular, with nearly three-quarters of the companies using them. Department stores in the study use orientation programs more frequently than either mass merchandise or specialty stores.

Orientation programs are used nearly as frequently for nonsecurity personnel as they are for security personnel. In-store training is still the most commonly used approach (85%), with films the second most frequent category (59%). While training manuals were used by 74% of the companies for security personnel, only 53% of the respondents use them for nonsecurity personnel.

Table 24

Components of Personnel Training Programs

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Training for Security Personnel				
Training Manual	79%	79%	63%	74%
In-Store Training	90	97	80	89
Formal Classes	50	74	28	49
Films	64	91	37	62
Other	16	9	20	16
No Program	6	3	13	8
Training for Nonsecurity Personnel				
Training Manual	60	23	61	53
In-Store Training	86	80	88	85
Formal Classes	38	54	30	39
Films	68	80	33	59
Other	8	0	7	6
No Program	1	3	2	2

Overall, nearly 70% of the companies have an ongoing program to train both security and nonsecurity personnel in the techniques of loss prevention. A higher percentage of department stores (78%) have ongoing programs for their employees.

Personnel Policies: Reward and Recognition Programs

Reward programs are based on the premise that the majority of employees are trustworthy and that the use of employees to combat theft will help reduce shrinkage.

Monetary awards may be given to employees for several reasons, such as giving information to security personnel that leads to the apprehension of a shoplifter, giving information to security that leads to the apprehension of an employee, offering suggestions on loss prevention, and contributing to an overall improvement in departmental or total store shrinkage results. Some companies have instituted a system whereby employees share in the benefits of store improvement of shrinkage results. They share in the savings in a manner similar to productivity improvement programs. Companies that do not provide monetary awards may either put a commendation in the employee's file or give the employee a certificate of merit.

Seventy-five percent of the participants reported having either a reward or recognition system, up from the 70% reported last year. Participants were asked how they reward employees for improved loss prevention. Fifty-two percent have some type of monetary reward program for helping to reduce shrinkage or apprehend thieves. Thirty-three percent provide other forms of recognition to individual employees who are crucial to shrinkage control, with only 25% reporting that they have no programs at all. Thirty percent of last year's participants reported that they had no reward programs.

Table 25

Reward Policies for Improved Loss Prevention

	Mass Merchandisers	Department Stores	Specialty Stores	All Participants
Pay Nonsecurity Personnel for Apprehensions	25%	56%	21%	30%
Pay Security Personnel for Apprehensions	4	6	0	3
Pay All Employees for Shrinkage Reduction	7	11	11	9
Pay Employees Responsible for Departmental Shrinkage Reduction	7	11	15	10
Recognition of Personnel for Apprehensions	47	39	42	44
Recognition of Personnel for Shrinkage Control	32	28	40	33
Other Rewards	12	31	9	15
No Rewards	32	6	28	25

Among mass merchandisers, 43% of the companies reported paying employees for helping to reduce losses. Other forms of recognition given were awards for assisting in the apprehension of shoplifters (47%) or in the control of shrinkage (32%).

Mass Merchandisers: Comparison of High and Low Shrinkage Companies

This section focuses on the differences between the policies and procedures of high shrinkage and low shrinkage companies in the mass merchandising segment of the industry. For the purposes of this study, low shrinkage mass merchandisers are defined as companies with less than 2% shrinkage; high shrinkage mass merchandisers are those companies with shrinkage of 3% or more. Low shrinkage statistics discussed in this section represent the combination of low shrinkage categories reported in the tables following the end of this section. Shrinkage characteristics of department and specialty stores are presented in later sections of this report.

Fifty percent of the reporting companies experienced low shrinkage, while 26% fell into the high shrinkage category.

The Participants

Low shrinkage companies tended to differ from high shrinkage companies in both company size and security budget. High shrinkage companies are more likely to be small: 65% of the companies with high shrinkage had sales of less than \$500 million (compared to 43% of the low shrinkage companies). Only 30% of the high shrinkage companies had 100 or more store locations, compared to 55% of the low shrinkage companies.

Companies less successful in controlling shrinkage had a tendency to spend more money on security. Whereas 76% of the low shrinkage companies spent less than 0.5% of their sales on security, only 53% of high shrinkage companies could contain their budgets at that level.

Personnel Practices

With the exception of the security interview, low shrinkage companies are more likely to make use of personnel screening methods, such as reference checks, credit checks, polygraph and PSE tests, and personality tests, in the hiring of security personnel. The security interview is given with almost the same frequency: 74% for high shrinkage companies and 78% for low shrinkage companies.

The same trend held true for screening nonsecurity personnel. Low shrinkage companies are more likely to use screening methods, with the exception of the PSE test (used by 5% of low shrinkage companies and 10% of those with high shrinkage).

Both high and low shrinkage companies which refrain from using the polygraph are most likely to cite management philosophy (51% low, 40% high) as the reason why. More high shrinkage companies report having a better alternative to using the polygraph than do low shrinkage companies.

More high shrinkage companies refrain from using the PSE test because of legal constraints and management philosophy than do low shrinkage companies. More low shrinkage companies, however, felt that the tests were not cost-effective.

If the polygraph is administered, high shrinkage companies (80%) are more likely to use it in exceptional cases than are low shrinkage companies (56%). The reverse is true for the PSE test, where low shrinkage companies (29%) are more likely to administer it in exceptional cases than are high shrinkage companies (14%).

In every employee category, low shrinkage companies reported greater use of both polygraph and PSE tests than did high shrinkage companies.

High shrinkage companies were more likely to consider a college education to be important for new hires in the security function (32%, vs. 11% of low shrinkage companies). Retail experience, however, was more likely to be important to low shrinkage companies (33%) than high shrinkage companies (24%).

Companies successful in controlling shrinkage were more likely to train new hires in the security function through the use of films, formal classes, and training manuals. In-store training was used with nearly the same frequency by both groups. In training nonsecurity personnel, low shrinkage companies used all the methods more frequently, with the exception of in-store training, which was used slightly more frequently by high shrinkage companies. Low shrinkage companies were more likely to provide a continuing program on loss prevention techniques to update security personnel (81% vs. 61%) and nonsecurity personnel (82% vs. 65%).

Security Practices

On their selling floors, high shrinkage and low shrinkage companies tended to emphasize different security practices. Companies that were more successful in controlling shrinkage were more likely to use mirrors (95% vs. 70%), limited access areas (89% vs. 80%), POS technology (66% vs. 40%), and observation booths (58% vs. 50%). Less successful companies were more apt to use lock-and-chain devices (85% vs. 71%), guards (80% vs. 73%), television monitors (55% vs. 46%), and electronic tags (45% vs. 32%).

Low shrinkage companies attributed a higher percentage of shrinkage to employee theft than did high shrinkage companies (55% vs. 42%), while high shrinkage companies attributed a higher percentage to customer shoplifting. There were minimal differences in the percentages attributed to errors in paperwork and accounting procedures.

Prosecution Policies

Low shrinkage companies tend to spend a smaller percentage of sales on prosecution. On the average, 75% of the low shrinkage companies spend less than 0.1% of sales on prosecution, compared to 43% of the high shrinkage companies.

For both customers and employees, low shrinkage companies report that they were more likely to prosecute all individuals they apprehended than were high shrinkage companies. High shrinkage companies report that they were more likely than low shrinkage companies to prosecute on a case-by-case basis.

Profile of Low Shrinkage Mass Merchandisers

The following profile presents a summary of the characteristics and loss prevention policies of the mass merchandising companies that reported shrinkage results under 2%.

General Characteristics

- These companies are often large in size: 57% reported sales of \$500 million or greater, and 55% had 100 stores or more.
- They often have at least half of their stores in suburban locations (71%).
- They tend to spend less than 0.5% of total sales revenues on their security function (76%).

Personnel Practices

- New hires in the security function receive special training (89%) through the use of a training manual (92%), in-store training (89%), films (72%) and formal classes (58%).
- New hires into the security function are screened through a background check (92%), security or loss prevention interview (78%), credit check (36%), and polygraph test (27%). Background checks are also performed on nonsecurity personnel (92%).
- Polygraph and PSE tests are used with nearly the same frequency (30% and 28%). When not used, management philosophy is the reason given most frequently for refraining.
- Employees are rewarded for their role in improving shrinkage (63%) through monetary payment (45%), or through recognition for apprehension of offenders (45%), and/or for controlling departmental shrinkage (32%).

Control Policies

- Of those apprehended, 63% were prosecuted, and 78% of the prosecutions resulted in convictions.
- Security devices most likely to be used in the selling area are mirrors (95%), limited access areas (89%), and point-of-sale technology (66%).

Attitudes Regarding Shrinkage

- Retailers are likely to attribute the greatest portion of their shrinkage to employee theft; 74% attributed at least half of their shrinkage to this problem.
- Retailers believe that the most effective actions they could take to reduce shrinkage in their companies are improving employee education (95%), improving paperwork and accounting methods (55%), improving employee screening (48%), and improving cash register control (45%).

Table 26

**Mass Merchandisers:
1982 Sales Volume by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Under \$100 Million	23%	29%	28%	60%
\$100 to \$499 Million	23	13	11	5
\$500 Million to \$1 Billion	23	25	22	20
Over \$1 Billion	31	33	39	15

Table 27

**Mass Merchandisers:
Total Security Expenditure as a Percentage of 1982 Sales Volume
by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Less than .1%	15%	21%	6%	21%
.1% to .24%	23	25	29	11
.25% to .49%	47	25	24	21
.5% to .99%	15	29	35	16
1% or More	0	0	6	33

Table 28

**Mass Merchandisers:
Components of Personnel Training Programs by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Training for Security Personnel				
Training Manual	92%	91%	68%	67%
In-Store Training	100	83	89	89
Formal Classes	69	52	44	44
Films	69	74	67	50
Other	23	9	17	22
No Program	15	9	6	0
Training for Nonsecurity Personnel				
Training Manual	71	75	50	42
In-Store Training	93	92	67	95
Formal Classes	57	54	28	21
Films	79	79	72	47
Other	7	8	11	11
No Program	7	0	0	0

Table 29

**Mass Merchandisers:
Security Devices Used on the Selling Floor by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Mirrors	93%	96%	90%	70%
Limited Access Areas	93	88	72	80
Observation Booths	79	46	56	50
Visible TV Monitors	57	42	50	60
Concealed TV Monitors	57	38	44	50
Electronic Tags	43	25	33	45
Point-of-Sale Systems	79	58	61	40
Guards	86	67	56	80
Lock-and-Chain Devices	86	63	50	85
Attendants	50	33	50	30

Department Stores: Comparison of High and Low Shrinkage Companies

This section focuses on the difference between the policies and procedures of high shrinkage and low shrinkage department stores. For the purposes of this study, low shrinkage stores are defined as those with shrinkage of less than 2% of sales; high shrinkage companies are those with shrinkage of 3% or more of sales. Low shrinkage statistics quoted in this section represent the combination of the low shrinkage categories reported in the tables following the end of this section.

Twenty-three percent of the companies had shrinkage of less than 2% of sales. Thirty percent fell into the high shrinkage group.

The Participants

The majority of the participants reported sales of less than \$500 million (100% of low shrinkage companies and 70% of high shrinkage companies); 75% of the low shrinkage and 100% of the high shrinkage companies had fewer than 50 stores.

Forty-three percent of the low shrinkage companies spent less than 0.5% of their sales on security in 1982 (compared to 11% of the high shrinkage companies).

Personnel Practices

High shrinkage companies generally make more extensive use of screening practices for security and nonsecurity personnel. The reference check was used by all of the high shrinkage companies, with more than three-quarters of the low shrinkage companies also reporting its use. For both groups of employees, the security and loss prevention interview was also popular.

Half of the high shrinkage department stores consider significant retail experience to be very important for new hires in the security function. Only 33% of the low shrinkage companies regard this attribute as important. None of the low shrinkage companies considered a college education to be important, as compared to 30% of the high shrinkage companies.

The trends in training for both security and nonsecurity personnel are similar: high shrinkage companies provide more comprehensive training, with in-store training and films as the most popular methods. All of the participating high shrinkage department stores provide in-store training for new security personnel, as do 86% of the low shrinkage companies.

Security Practices

Low shrinkage and high shrinkage companies differed in their use of security devices. High shrinkage companies use electronic tags more frequently than do low shrinkage department stores (90% vs. 38%). They also use observation booths (90% vs. 50%), lock and chain apparatus (80% vs. 63%), and mirrors (80% vs. 50%) more often than do low shrinkage companies. Low shrinkage companies favor point-of-sale technology (88% vs. 60%) and visible monitors (63% vs. 30%).

Prosecution Policies

Participating department stores varied in the application of their prosecution policies. Fifty percent of the low shrinkage companies report that they prosecute all customers caught shoplifting, compared to 10% of the high shrinkage companies. In contrast, low shrinkage companies report that they are less likely to prosecute on a case-by-case basis (38% vs. 50%) than high shrinkage companies.

Eighty-six percent of the low shrinkage companies report that they prosecute employees caught shoplifting on a case-by-case basis, compared to 60% of the high shrinkage companies.

Profile of Low Shrinkage Department Stores

The following profile presents a summary of the characteristics and loss prevention policies of the participating department stores that reported shrinkage at less than 2% of sales.

General Characteristics

- All of the retailers reported sales of under \$100 million, and 75% had fewer than 50 stores.
- Most (88%) have more than three-quarters of their stores in suburban locations.

Personnel Practices

- Half of the companies reported that they updated their security and non-security personnel in the techniques of security and loss prevention.
- Popular training techniques for security personnel include in-store training (86%), films (71%), and training manuals (71%).
- Screening practices for new hires in the security and nonsecurity functions most frequently include background checks (86% and 75%, respectively) and credit checks (71% and 25%). In addition, a security or loss prevention interview (57%) is a popular technique for screening new hires in the security function.
- Employees are rewarded for their roles in controlling shrinkage (75%), often through monetary rewards (50%) to employees. Recognition for assistance leading to the apprehension of shoplifters (25%) or controlling departmental shrinkage (13%) are techniques which are also used.
- Few companies (13%) use polygraph tests, and management philosophy (63%) is cited most frequently as the reason why. PSE tests were not used by any of the low shrinkage department stores.

Control Policies

- On average, low shrinkage department stores prosecuted a higher percentage than average of the apprehended shoplifters. Almost all (99%) of these prosecutions resulted in convictions.
- Security devices most likely to be used in the selling area are point-of-sale technology (88%), guards (75%), and visible monitors (63%).

Attitudes Regarding Shrinkage

- Retailers believe that the three most effective actions they could take to reduce shrinkage are improving employee education (88%), improving employee screening (75%), and improving paperwork and accounting methods (63%).

Table 30

**Department Stores:
1982 Sales Volume by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Under \$100 Million	100%	100%	71%	50%
\$100 to \$499 Million	0	0	12	20
\$500 Million or More	0	0	17	30

Table 31

**Department Stores:
Total Security Expenditure as a Percentage of 1982 Sales Volume
by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Less than .1%	0%	20%	6%	0%
.1% to .24%	50	0	0	0
.25% to .49%	0	20	24	11
.5% to .99%	50	60	64	44
1% or more	0	0	6	45

Profile of Low Shrinkage Department Stores

Table 32

**Department Stores:
Components of Personnel Training Programs by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Training for Security Personnel				
Training Manual	50%	80%	77%	89%
In-Store Training	100	80	100	100
Formal Classes	50	60	77	78
Films	50	80	94	100
Other	0	20	0	22
No Program	0	20	0	0
Training for Nonsecurity Personnel				
Training Manual	50	17	24	11
In-Store Training	100	67	82	78
Formal Classes	100	17	71	44
Films	0	67	94	78
Other	0	0	0	0
No Program	0	17	0	0

Table 33

**Department Stores:
Security Devices Used on the Selling Floor by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Mirrors	0%	67%	88%	80%
Limited Access Areas	50	50	77	70
Observation Booths	0	67	82	90
Visible TV Monitors	50	67	47	30
Concealed TV Monitors	0	33	88	40
Electronic Tags	50	33	59	90
Point-of-Sale Systems	100	83	88	60
Guards	50	83	82	80
Lock-and-Chain Devices	50	67	88	80
Attendants	50	33	59	60
Other	50	0	18	10

Specialty Stores: Comparison of High and Low Shrinkage Companies

In this section, we consider the differences between the policies and procedures of high and low shrinkage specialty stores. For purposes of this study, low shrinkage stores are defined as those with shrinkage of less than 2% of sales; high shrinkage companies are those with shrinkage of 3% or more of sales. Low shrinkage statistics discussed in this section represent the combination of low shrinkage categories reported in the tables following the end of this section.

Fifty-six percent of the companies had shrinkage of less than 2% of sales.

The Participants

High shrinkage companies tended to be smaller than low shrinkage companies, with 60% of the high shrinkage companies reporting sales of less than \$100 million. Sixty percent had fewer than 100 stores. Only 37% of the low shrinkage companies had sales of less than \$100 million. Seventy percent of the low shrinkage specialty stores spent less than 0.5% of their sales on security in 1982 (compared to 56% of the high shrinkage companies).

Personnel Practices

High shrinkage companies reported using most screening methods with higher incidence than did low shrinkage companies. The reference check was used in hiring security personnel by both groups with the highest frequency—89% for high shrinkage companies and 76% for low shrinkage companies. Security interviews and personality tests, however, were used more frequently by low shrinkage companies. The same trends were found in the hiring of nonsecurity personnel, with the exception of credit checks, which are used more extensively by low shrinkage companies.

High shrinkage companies consider significant retail experience to be an important background consideration for new hires in the security function. Forty-six percent of the low shrinkage companies regard this attribute as being important.

Nearly twice as many high shrinkage companies (90%) as low shrinkage companies (48%) administer polygraph tests. More than 40% of the low shrinkage stores felt that management philosophy was the most important reason for not administering the test, compared to 20% of the high shrinkage companies.

Low shrinkage companies seem to provide more training for new security personnel than do high shrinkage companies. With the exception of the training manual, low shrinkage companies utilize orientation programs such as films, formal classes, and in-store training to a greater extent.

In-store training was prevalent for training nonsecurity personnel (low shrinkage—83%, high shrinkage—80%). Fifty-seven percent of the low shrinkage companies (versus 38% of the high shrinkage companies) have continuing programs to update security personnel in the techniques of security and loss prevention. The results for nonsecurity personnel were comparable to those reported for security personnel.

Security Practices

Low shrinkage and high shrinkage companies differed slightly in their use of security devices on the selling floor. The largest difference occurred in the use of electronic tags, which are used by 40% of the high shrinkage companies and only 18% of the low shrinkage organizations.

Prosecution Policies

The emphasis of management, in both high and low shrinkage companies, is on the prevention of shoplifting as opposed to the apprehension of shoplifters. The responding specialty stores also reported that more money was spent on the prevention of shoplifting.

Low shrinkage companies are more likely to prosecute all those apprehended than are the high shrinkage companies. High shrinkage companies are more likely to prosecute only when a conviction is certain.

Profile of Low Shrinkage Specialty Stores

The following profile presents a summary of the characteristics and loss prevention policies of the participating specialty stores that reported shrinkage of less than 2% of sales.

General Characteristics

- Sixty-three percent of the retailers reported sales of less than \$500 million, and 43% had fewer than 50 stores.
- Half have at least 50% of their stores in suburban locations.
- These companies tend to spend less than 0.5% of their total sales revenue on the security function (67%).

Personnel Practices

- There was no difference in the percentage of security and nonsecurity personnel who are being updated continually in the techniques of security and loss prevention.
- In-store training is the most popular training technique for both security (76%) and nonsecurity (83%) personnel. The training manual is the second most popular technique for both groups.
- Retail experience (46%) was the attribute that most low shrinkage specialty stores viewed as being very important for new hires.
- The polygraph test was used by almost half (48%) of the stores. It is most frequently administered in exceptional cases (50%) to the employee groups consisting of cashiers (43%) and management (43%).
- Employees are rewarded for their roles in controlling shrinkage (85%), mostly through recognition for controlling departmental shrinkage (45%) or apprehending shoplifters (41%).

Control Policies

- Security devices most likely to be used in the selling area are limited access areas (68%), lock-and-chain apparatus (68%), and mirrors (61%).

Attitudes Regarding Shrinkage

- Retailers believe that the three most effective actions they could take to reduce shrinkage are improving their methods of employee education (76%), paperwork and accounting controls (48%), and employee screening (38%).

Table 34

**Specialty Stores:
1982 Sales Volume by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Under \$100 Million	55%	8%	31%	60%
\$100 to \$499 Million	17	42	23	20
\$500 Million to \$1 Billion	17	42	31	20
Over \$1 Billion	11	8	15	0

Table 35

**Specialty Stores:
Total Security Expenditure as a Percentage of 1982 Sales Volume
by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Less than .1%	25%	46%	9%	34%
.1% to .24%	31	18	27	11
.25% to .49%	19	0	37	11
.5% to .99%	6	18	18	22
1% or More	19	18	9	22

Table 36

**Specialty Stores:
Components of Personnel Training Programs by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Training for Security Personnel				
Training Manual	43%	73%	60%	75%
In-Store Training	71	82	100	63
Formal Classes	14	14	30	13
Films	36	55	30	25
Other	29	18	30	0
No Program	14	18	0	25
Training for Nonsecurity Personnel				
Training Manual	44	67	54	80
In-Store Training	89	75	100	80
Formal Classes	28	25	23	40
Films	28	50	31	20
Other	0	17	15	0
No Program	0	0	0	10

Table 37

**Specialty Stores:
Security Devices Used on the Selling Floor by Shrinkage Percentage**

	Shrinkage Percentage			
	Under 1%	1% to 1.9%	2% to 2.9%	3% and Over
Mirrors	38%	92%	79%	60%
Limited Access Areas	63	75	57	70
Observation Booths	19	33	14	10
Visible TV Monitors	19	42	29	20
Concealed TV Monitors	0	0	7	10
Electronic Tags	25	8	43	40
Point-of-Sale Systems	19	50	57	30
Guards	25	50	57	30
Lock-and-Chain Devices	63	75	43	50
Attendants	6	17	29	10
Other	6	25	0	10
None	13	0	0	0

Appendix I:

Food Retailers

The Participants

Twenty-four food retailers, operating in more than 3,800 individual locations, participated in this year's study. Their aggregate 1982 sales volume was in excess of \$23 billion.

Thirty percent of the participating food retailers reported a 1982 sales volume of \$500 million or greater. Twenty-eight percent of the respondents had over 100 store locations, and 11% had over 1,000 store locations.

Shrinkage Results

Study participants reported aggregate inventory shrinkage to be 1.1% of sales for 1982, an increase from the 0.9% reported in last year's study. This represents an even larger percentage of increase in shrinkage than that reported for nonfood retailers.

The 1982 retail dollar value for shrinkage for the participating companies exceeded \$250 million. In the sections on security expenditures, shrinkage control practices, prosecutions, and personnel policies, we discuss some of the actions food retailers have taken to reduce shrinkage.

Shrinkage Attributions

The participating food retailers attributed approximately 50% of their inventory shrinkage to employee theft, 30% to shoplifting, and 20% to errors in paperwork and accounting procedures.

It should be noted that, in general, most companies do not have formal methods of determining the actual source of shrinkage. For purposes of this study, however, we asked food retailers for opinions.

Participants were asked to indicate up to three courses of action that would be most beneficial in reducing shrinkage in their companies. The most common response was to improve employee education and awareness of loss prevention (96%). Another 52% believe improved personnel screening would improve shrinkage performance. These results are not surprising since these companies attributed half of their shrinkage to employee theft. Although the respondents attributed the smallest portion of their shrinkage to paperwork problems, 26% believed that improved paperwork and accounting methods would improve shrinkage results.

Security Expenditures

The money spent in 1982 on security and loss prevention staffing, equipment, and programs totaled \$113 million. This represents approximately 0.5% of sales, an increase from the 0.4% reported in last year's report.

Security expenditures were most likely to be on payroll costs: on the average, 24% went to internal guards and 18% went to payroll other than guards.

Sixty-one percent of the food retailers reported that the management philosophy of their company emphasized the prevention of shoplifting over the apprehension of shoplifters; and 52% reported that the amount of money spent on the prevention of shoplifting was greater than the amount spent on the apprehension of shoplifters.

Shrinkage Control Practices

Mirrors, the most frequently utilized security devices, were used by 91% of the companies. Limited access or locked areas were used by 73% of the participants. Guards (39%) and observation booths (36%) were judged to be the most effective devices by companies reporting their use. Although 88% of the participants use mirrors, only 5% of the companies using them believe them to be the most effective device for loss prevention on the selling floor.

Participants believe that increased employee education in loss prevention (96%) and improved employee screening (52%) would result in improved shrinkage performance.

Apprehension and Prosecution

On the average, over three-quarters of the apprehensions were customers, with the remaining percentage attributed to employees. For customers, 54% of the apprehensions were attributed to females, with the remaining 46% to males. There was little difference between males and females for employee apprehensions.

The largest percentage of apprehensions was attributed to the young adult (ages 18-35) category for both males and females, in both the customer and employee categories.

The majority of customers apprehended were employed, 64% for males and 54% for females.

Overall, those companies reporting data prosecuted an average of 19% of all individuals apprehended in their stores; of these, 57% resulted in convictions. In total, of the 110,000 apprehensions reported, 15 out of 10,000 resulted in false arrest suits against the companies.

When asked about their prosecution policies, only 27% of the respondents said they prosecute all customers caught shoplifting. Thirty-five percent of the participants prosecute all employees involved in theft.

Staffing Practices

Sixty-two percent of the responding food retailers reported having more than 20 full-time security personnel. Less than 10% have less than four full-time security personnel. As expected, the number of employees in the security function varied with firm size; all of the companies with less than \$100 million in sales have less than 50 full-time security personnel, while all of the companies with sales in excess of \$500 million employ more than 50 in the security function.

Hiring Practices

A background check (e.g., employment experience, education, and personal references) was the method most frequently used by food retailers (96%) for screening new security personnel. Sixty-eight percent require credit checks, and 27% perform polygraph tests.

For screening nonsecurity personnel, background checks (86%) and personality tests (32%) were the most popular. Fourteen percent of the companies used credit checks, only 9% performed polygraph tests to screen nonsecurity personnel.

For both polygraph and PSE tests, management philosophy was the reason given most frequently by companies who refrain from their use.

Within the companies administering the polygraph and PSE tests, cashiers (85% polygraph and 14% PSE) and security personnel (85% polygraph and 7% PSE) are the employee groups most likely to be given the tests.

Seventy-three percent of the companies using polygraph testing employ an outside service to conduct the tests, and another 13% conduct the tests themselves. The PSE test is usually administered by an outside service (67%) or a combination of outside service and company employees (33%).

Personnel Training Policies

Eighty-six percent of the food retailers responding to the survey have continuing training programs in security and loss prevention techniques for their security personnel.

More than 90% of the companies use some method of formal training for their new security personnel in techniques of loss prevention and security. These include training manuals (91%), films (52%), and formal classes (52%).

Most of the companies (95%) also have some form of training program for their new nonsecurity personnel. In-store training programs were the most frequently used method, with 76% of the companies using them. Films and training manuals were each used by 52% of the companies.

Reward and Recognition Programs

Fifty-six percent of the participating food retailers have formal reward or recognition programs for employees who are instrumental in controlling shrinkage. Twenty-one percent provide monetary rewards to employees for helping to reduce shrinkage or for apprehending individuals who steal.

Table 38

**Food Retailers:
1982 Sales Volume by Shrinkage Percentage**

	Shrinkage Percentage		
	Under 1%	1% to 1.9%	2% to 2.9%
Under \$100 Million	10%	25%	50%
\$100 to \$499 Million	20	0	25
\$500 Million to \$1 Billion	20	0	25
Over \$1 Billion	50	75	0

Table 39

**Food Retailers:
Total Security Expenditure as a Percentage of 1982 Sales Volume
by Shrinkage Percentage**

	Shrinkage Percentage		
	Under 1%	1% to 1.9%	2% to 2.9%
Less than .1%	60%	0%	0%
.1% to .24%	20	100	0
.25% to .49%	10	0	33
.5% to .99%	0	0	0
1% or more	10	0	67

Table 40

**Food Retailers:
Security Devices Used on the Selling Floor by Shrinkage Percentage**

	Shrinkage Percentage		
	Under 1%	1% to 1.9%	2% to 2.9%
Mirrors	80%	100%	100%
Limited Access Areas	90	75	75
Observation Booths	40	50	75
Visible TV Monitors	50	75	50
Concealed TV Monitors	50	75	25
Electronic Tags	10	0	0
Point-of-Sale Systems	50	75	50
Guards	80	25	25
Lock-and-Chain Devices	90	75	75

APPENDIX II

1983 Loss Prevention Checklist

This list indicates several steps that can be taken by retailers to help control shrinkage. Does your company use these techniques?

	Yes	No
1. Are shrinkage statistics maintained by:		
(a) Region?	—	—
(b) Store?	—	—
(c) Department?	—	—
2. Do staffing schedules of both security and sales personnel reflect:		
(a) Customer traffic patterns?	—	—
(b) Promotional and seasonal staffing needs?	—	—
3. Are selling personnel adequately trained in security and loss prevention techniques?	—	—
4. Are background checks used and currently evaluated for all hires?	—	—
5. Are personality/psychological tests used to screen new hires?	—	—
6. Are polygraph tests used to screen employees on a recurring basis?	—	—
7. Are PSE tests (voice stress analysis) used to screen employees on a recurring basis?	—	—
8. Are selling personnel aware of the method used to reach security personnel in case of emergency?	—	—
9. Are selling personnel properly trained in the writing of sales checks, the use of register equipment, and the reading of price tickets?	—	—
10. Are conspicuous signs posted throughout the store warning that all shoplifters will be prosecuted?	—	—
11. Are all store areas kept locked when not in use?	—	—
12. Are locking devices on showcases and doors checked for their state of repair?	—	—
13. Are spot audits made of merchandise requiring electronic tags to determine compliance?	—	—
14. Are statistics maintained segregating apprehensions of both employees and customers?	—	—
15. Are statistics maintained analyzing customer apprehensions by:		
(a) Gender?	—	—
(b) Age?	—	—
(c) Employment status?	—	—
16. Are statistics maintained analyzing employee apprehensions by:		
(a) Gender?	—	—
(b) Age?	—	—
(c) Department?	—	—
17. Are statistics maintained regarding the cost of prosecuting shoplifters?	—	—
18. Do you have a continuing training program to update personnel in loss prevention techniques?	—	—
19. Are the results of apprehensions, convictions, and prosecution policies posted in employee work areas (excluding the selling floor)?	—	—

	Yes	No
20. Are security personnel and guards stationed at the door completely knowledgeable about techniques of apprehensions to avoid legal problems?	—	—
21. Does the receiving department check incoming merchandise against vendor invoices to ensure that all items are present?	—	—
22. Are all discrepancies documented and investigated immediately?	—	—
23. Is the vendor invoice matched against a purchase order on file?	—	—
24. Are retail price tickets checked to ensure correctness?	—	—
25. Is the merchandise adequately protected and accounted for when it is moved from receiving or storage areas to the selling floor?	—	—
26. Is inventory of high-unit items taken on a daily basis?	—	—
27. Are there strict controls and frequent reviews for the handling of:		
(a) Layaways?	—	—
(b) Employee discounts?	—	—
(c) Markdowns?	—	—
(d) Interstore transfers?	—	—
28. Are purchase markdown and interstore transfer journals distributed and reviewed on a regular basis?	—	—
29. Are all customer claims of nondelivery investigated promptly?	—	—
30. Are policies in effect that provide for timely follow-up of high shrinkage departments?	—	—
31. Do you have a policy in use for the prosecution of employees and customers caught shoplifting?	—	—
32. Do you have a formalized inventory shrinkage reduction strategy that focuses on the prevention of shrinkage losses or early detection of theft?	—	—
33. Is specific responsibility established for shortages at each inventory location?	—	—
34. Is your company's shrinkage reduction effort coordinated by a single individual charged with that responsibility?	—	—
35. Does each management function (for example, the president, vice president, store manager, and internal audit) have a clearly defined role in reducing shrinkage?	—	—
36. Do you have a reward or recognition program for employees instrumental in the apprehension of shoplifters or in the reduction of shortages?	—	—
37. Do you test your security equipment on a regular basis?	—	—
38. Is the effectiveness of and necessity for uniformed guard coverage periodically reviewed?	—	—
39. Do you conduct a follow-up audit of weaknesses derived from internal or external audit?	—	—
40. Is merchandise held as evidence for shoplifting under accounting control?	—	—

If you would like additional copies of this Loss Prevention Checklist, or if you have questions about the implications of your answers, please contact:

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